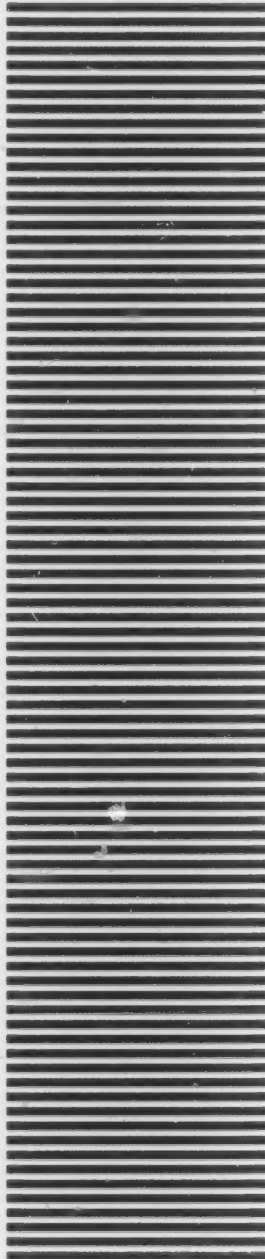




The Conference Board



Measuring User Satisfaction With Information Management

A Survey of major corporations reveals that:

- *40% employ formal user surveys*
- *follow-up is considered essential*
- *survey results lead to change*
- *non-surveying firms rely on informal feedback*

Research Report No. 930

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The Conference Board is a business information service whose purpose is to assist senior executives and other leaders in arriving at sound decisions. Since its founding in 1916, the Board has been creating close personal networks of leaders who exchange experience and judgment on significant issues in management practice, economics and public policy. The networks are supported by an international program of research and meetings which The Conference Board staff of more than 350 persons carries out from offices in New York, Washington, Ottawa and Brussels.

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Measuring User Satisfaction With Information Management

by George Newman

A Report from The Conference Board



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From The President

Measuring the performance of staff departments has always posed difficulties for corporate management. Today, this problem is readily apparent in the case of Information Services (I.S.)—a function that is growing by leaps and bounds in many companies, both in terms of size and importance. In a recent survey of CEOs of major firms, a majority not only voted I.S. Number One in terms of rapidly rising costs but also as the staff unit with which they feel least comfortable.

To assist companies in grappling with these issues, The Conference Board has produced this report on the methods major firms are using to measure I.S. user satisfaction. It demonstrates that many approaches are employed to solicit

feedback, including formal, written surveys. The report and its appendix that provides a range of sample surveys should prove informative. Companies using such questionnaires can compare their practices with those of others. Those that do not, can take a closer look at the benefits and drawbacks of this device that its practitioners find useful.

The Conference Board would like to thank all of the North American and European executives who completed questionnaires for this research. Special thanks go to those who, in addition, also contributed time to be interviewed.

PRESTON TOWNLEY
President

Highlights

Corporate information services (I.S.) departments, as most other staff units, seek feedback from their users, and according to a recent Conference Board survey, a sizable proportion accomplish this through formal user satisfaction surveys. This report, which is based on interview and survey data, examines the incidence, nature, purpose, and uses of I.S. surveys; why companies do or do not conduct such polls; and how some firms get along without them.

Among the 292 responding companies:

- Forty-three percent of the North American and 26 percent of the European firms conduct I.S. user satisfaction surveys.
- The larger the company, the more likely it is to employ such formal surveys.
- Surveys are primarily used to:
 - Make I.S. more responsive to users;
 - Identify dissatisfied users;
 - Pinpoint problem areas in specific I.S. units; and
 - Monitor progress over time.
- Less than half the surveying companies use them for performance evaluation and even fewer tie compensation to survey results.
- Most surveys have both quantitative (ratings) and qualitative (comments) parts. Many ask users to rate not only satisfaction with but also the importance of various elements of the service.
- The number of respondents ranges from under ten to over 1,000; most surveys are addressed to fewer than 100 people.
- The frequency of surveys ranges from those conducted on a monthly basis to those that run biannually, with annual surveys being the most common. One-third of the surveying corporations poll at irregular intervals, often on the completion of major projects.
- Most surveys are conducted by the I.S. unit; the rest, by other departments or outsiders.
- Responsiveness, timeliness, and quality are measured by almost all surveys.
- Follow-up with individual users, especially those with problems, is considered critical.
- Surveys often lead to changes in:
 - Attitude (on both sides);
 - Organization;
 - Resource allocation;
 - Personnel assignment;
 - Communication; and
 - I.S. outlook on and understanding of the business.
- Among the non-surveying companies, some have tried surveys and discontinued them, many have considered them, and some plan to introduce them.
- While most non-surveying firms consider surveys an inadequate substitute for face-to-face meetings with users, surveying companies see them as complementing—and indeed facilitating and enhancing—such meetings. Among the kinds of meetings non-surveying companies hold in lieu of surveys are:
 - Focus groups, with participants drawn from several departments, and, in some cases, from various levels of management;
 - Meetings with one department at a time;
 - Steering committee meetings; and
 - User-I.S. contact through a sub-unit of I.S. dedicated to customer service and liaison.
- The majority of non-surveying companies monitor service levels against performance standards (often embodied in contracts with users)—but so do an even higher portion of surveying companies.

Method

The data for this report were derived from a four-page questionnaire and personal interviews. The questionnaire was mailed in the second half of 1988 to about 1,000 senior I.S. executives of leading companies—roughly 800 in North America (primarily in the United States) and 200 in Europe. In all, 292 usable responses were received: 234 from North America and 58 from Europe. As the table below indicates, all major industry groupings were represented on both continents.

Number of Respondents by Industry

<i>Industry</i>	<i>North America</i>	<i>Europe</i>	<i>Total</i>
Manufacturing	98	26	124
Financial institutions	44	12	56
Utilities	39	5	44
Other services	36	11	47
Widely diversified	17	4	21
Total	234	58	292

Number of Respondents by Company Size

<i>Annual Sales*</i>	<i>North America</i>	<i>Europe</i>	<i>Total</i>
Under \$100 million	16	6	22
\$100-\$500 million	36	9	45
\$500 million-\$1 billion	29	8	37
\$1-\$5 billion	91	17	108
Over \$5 billion	62	18	80
Total	234	58	292

* Assets for financial services companies

The survey was supplemented by two dozen personal interviews with I.S. executives, their superiors, and I.S. users.

A cautionary note. In today's complex business organizations, where many semiautonomous business units operate under a corporate umbrella and where the role of the central unit varies widely, the results of inquiries such as this have to be interpreted with caution. Typically the responses reflect practices at the corporate level; business units may follow policies that differ from those of the corporation or other business units.

Introduction

"How am I doing?," Edward Koch, the Mayor of New York City frequently asks his constituents. He is not alone. Most organizations and their leaders need feedback from the people they serve. Politicians, from the President to local legislators, pay a lot of attention to polls. Companies spend sizable sums on market research. It is not surprising, therefore, that companies' functional units and staff departments (especially those whose output and contribution cannot be easily measured) also want to know to what extent their internal "customers" are satisfied. This is certainly true of information services (in some companies, "Management Information Services" or "Systems" or "Information Management" units).

Measuring user satisfaction with I.S. is a controversial proposition. There appears to be wide agreement on the desirability, indeed the necessity, of listening to users, but less so on how big a role (if any) surveys should play in evaluating I.S. and its various constituent parts, and on how formal and quantitative the feedback should be.

A Controversial Speech

Eugene F. Bedell, then vice president and manager, information services, of The First Boston Corporation thinks surveys are very important and must be written, formal, and largely quantitative. In a speech given at a recent Board conference he stated: "Personal success in I.S. depends ultimately on senior management and user satisfaction. Strategic systems, the effective use of technology, the ability to manage technicians successfully, to deliver on time and within budget, to run data centers successfully, and to reduce costs are *less important*."¹

He related his own experience with a previous employer to illustrate his point that good performance is not enough. When he took over, I.S. performance was poor and users were dissatisfied. He set out to improve performance by setting very challenging goals.

"We succeeded. Within three months, we were consistently achieving our new performance targets. Within 12 months, we were almost never missing them. When I left the company, we had gone three-and-a-half years without missing a single data-center objective.

"We achieved our goals, but did we achieve outstanding success? No! *Despite our efforts and success in what we set out to do, the users were still unhappy.* We were dealing with a free-floating malaise.

"I concluded that we should attack the problems of user satisfaction more directly. I had tried to divine what the I.S. organization could do to make users happy. The trouble was that if the I.S. managers reached these objectives but the users were still unhappy, it was my problem, not the I.S. managers'.

"So, I changed the rules. Specifically:

- Toward the end of each year, I would measure user satisfaction using a questionnaire.
- Each I.S. manager was responsible for determining what would make his or her individual users happy.
- Fifty percent of the manager's performance rating was to be based on the users' rating, or on the improvement in that rating from one year to the next. It was up to each individual manager to see to it that his or her users were happy."

What was the result? According to Bedell, "Some I.S. managers thought the institution was being turned over to the inmates; they could not make the adjustment and left. Most, however, suddenly took a great interest in their users, visited them across the country (often for the first time), asked for their opinions, and began conducting surveys of their own. Most importantly, user satisfaction at last improved markedly and the long-sought objective was achieved."

The speech split the audience, many ardently supporting Mr. Bedell's views while others remained skeptical or sharply critical of the practices he advocated. The main contention was that surveys can turn a working relationship into a popularity contest. (See The Case Against Surveys on page 3.)

One reason Bedell puts such emphasis on ratings is that once attitudes toward I.S. solidify, they do not change easily or quickly.

"High user satisfaction and high user dissatisfaction have great momentum. If the users are happy and you run into difficulties with one important project, their attitudes will not change overnight. On the other hand, if things are bad, it takes a great deal of outstanding performance for users to be convinced that changes have been made."

¹Information Management: The New Strategic Weapon. The Conference Board Research Bulletin No. 220—1988, pp. 16-18.

Formal Surveys vs. Informal Methods

In a sense, all I.S. units gather information on user satisfaction as they inevitably come in contact with users in the course of their work. Most experts would agree, however, that there is a major distinction between formal (written) and informal (oral) surveys. The difference is analogous to that between organized market research and occasional feedback from customers or dealers. Written surveys are usually regular and quantitative, at least in part; while oral surveys are almost always ad hoc and nonquantitative. As a result, unlike oral surveys, written surveys are generally analyzed and reported at least to the executive to whom the head of I.S. reports.

Some executives conduct written surveys because they think oral surveys alone are not very productive. As one respondent noted, "If you just go in, sit down, and ask how it is going, you will get very little useful information." Many companies use the two in combination. For example: "In development, smaller jobs may be followed up only by oral discussion. We use written surveys on bigger jobs, but even then we may send out one of our people to help the user complete it." And, "We need all the feedback we can get, formal and informal. Otherwise we mesmerize ourselves with internal measurement results."

The Case for Surveys

I.S. executives express the benefits of surveys in a wide variety of ways. Many mention the positive effect on users: As one respondent commented, "Surveys demonstrate our willingness and wish to improve."

Other participants stress the impact on I.S. They argue that surveys:

- Are the only way they have to measure their effectiveness;
- Keep them attentive;
- Confirm or change the perceptions I.S. has of itself;
- Provide evidence to effect change;
- Help to determine if actions taken by I.S. are recognized by users as improvements.
- Give I.S. a chance to follow up;
- Pinpoint areas of misunderstandings; and
- Put all the problems on the table at one time for action.

Some I.S. executives value the insights surveys provide on what is important to users. This helps not only in resource allocation but also in measuring those aspects of the service that are critical to users. As one respondent observed, "Surveys show us where users' hot buttons are, so we can focus on them." Surveys are often considered superior to the "squeaky wheel" method, e.g., they "elicit information from those who would never speak up," and "for every user who complains, there might be ten who are just as unhappy but we would never find out."

Finally, some mention that surveys "give users a vehicle to vent frustrations." Interestingly, this is cited variously as both positive and negative.

One I.S. executive summarizes his advice as follows: "First and foremost, *do surveys*. They are very important. Second, follow up on them, have open, candid discussions with your clients, and demonstrate a willingness to change. Third, implement the changes and improvements agreed on and thereby close the loop."

Old hands stress that both the I.S. staff and users must feel that the survey is meant to be constructive and not punitive. In particular, surveys have to be explained thoroughly to the entire I.S. staff, so they will see the purpose and the benefits, and, very importantly, not feel threatened.

For most of the responding companies that use surveys, they are high-priority undertakings, and the head of I.S. takes an active part. Says one time-pressed I.S. chief: "We always take time for surveys. I personally read every one of them and my managers read every one that concerns them. Then, we sit down together to discuss each response. Finally, we get back to the users to see what can be done to improve our service and their satisfaction."

In his talk, Mr. Bedell summarized the case for achieving and tracking user satisfaction (although many I.S. executives would stop short of endorsing his last paragraph):

"Winning in I.S. requires an approach that *centers* on creating and measuring user satisfaction. What matters are not just objective performance measurements, but also how I.S. is perceived by its internal customers.

"Good technical performance is a necessary but not sufficient requirement for high user satisfaction.

"Perception is reality. It does not matter how good you are or how good you think you are. What matters is how good your customers think you are. I.S. people tend to focus only on *their* perception of reality; this fundamental flaw accounts for many of their problems.

If Surveys Were Banned

Some I.S. executives, when asked how they would respond if surveys, for whatever reason, were discontinued, argued that they could provide enough evidence to reverse the decision. But if not, matters would deteriorate. A comment in this vein:

"Over time you would erode your user base, your support. It would not happen overnight, especially if you have a good relationship, but it is sure to happen. If you could not do formal surveys, you would do what you could informally, getting the feedback in person or on the telephone. You would try to find the closest thing to surveys you can get away with, a substitute, even subterfuge, but it would only provide less reliable input in a more time-consuming process. Detection of trouble spots would be slower and more haphazard. User satisfaction would get worse, only you would not know it."

"Good fellowship is more important than logic and reason in developing high user satisfaction. If you can develop a positive relationship with your management and users (and provide a reasonable level of performance), you will probably have high user satisfaction."

The Case Against

Some companies simply believe they are not large enough to need surveys. Beyond that, as with most things in life, surveys, too, have a downside that their opponents clearly see and that even many of their supporters recognize.

Many non-surveying I.S. executives oppose surveys on the ground that they may replace "eyeball-to-eyeball" customer contact. Others consider surveys, especially quantitative, ratings-oriented surveys, a hindrance in establishing a constructive dialogue with users. Finally, some executives are not sure all dialogues generated by surveys are useful (see the box on p. 4).

Another commonly cited risk is the fear of raising expectations that cannot be fulfilled. I.S. managers made the following comments in this vein:

- "Surveys may leave the users with the impression that something can be done about whatever they are dissatisfied with, and this is not always the case."
- "They encourage wishful thinking."
- "Users expect instant miracles after the survey."

One executive finds that traditional surveys fail because they are one-sided: Only users are asked about the service.

"Problems can originate at both ends (user and I.S.) and therefore surveys that address only one side are not representative of the real world."

Some I.S. executives mention cost and time among the arguments against surveys, but most of these executives represent companies that do *not* conduct surveys. Surveying companies find the cost and time requirements reasonable to negligible. No company reported the assignment of any staff on a full-time basis to surveys. To be sure, the creation of a survey instrument from scratch, especially if it is elaborate, can be time consuming: one company estimated such development took 200 hours.

Another group of arguments against surveys relates to the I.S. response to user criticism. Comments along these lines included:

- "The I.S. staff tends to react to criticism defensively."
- "Surveys open I.S. up to undeserved criticism that can affect I.S. employees' records."
- "Responses may reflect personality conflicts rather than work performance." (Others, however, say that if there is a personality conflict, it can be better handled out in the open.)

Other problems ascribed to the surveys included:

- "Surveys tend to confirm what is already known."
- "They can be MISused and MISinterpreted."
- "The longer you survey, the more mechanical it gets."

A Company Has Second Thoughts about Ratings

A large multinational company is undergoing a sea change. It is moving from a framework and regime of *competition* to a framework and regime of *cooperation*. In external relationships with suppliers it is moving from competitive bids and short-term awards to the lowest bidder to long-term, sole supplier relationships based on trust and "partnering." A similar transformation affects internal relations among businesses and support units.

The company's rating system may be among the first victims of this fundamental change in philosophy and corporate culture. Traditionally the head of each business and staff department has rated every other staff department annually on a scale of one to ten, along a half dozen or so attributes such as technical competence and cooperation. Although the results were officially announced only to department heads, word got out and a stigma attached to units with low ratings. Also, 20 percent of these department heads' performance evaluation and bonus were based on their units' ratings.

The top I.S. executive of the company, one of those rated by and rating his peers, makes perhaps the most comprehensive and persuasive argument against ratings. (He has no problems with the qualitative, verbal part of user surveys or with service level standards.) He sees four somewhat overlapping problems.

1. Ratings Lead to Sub-optimization.

Tying incentives to the rating system encourages short-term maximization of departmental or business unit results. The executive does not get credit for improving the long-term prospects of his or her unit or for cooperating to improve the performance of another unit, either in the short or the long run. The sum of these results is bound to be less than optimum for the corporation. In I.S. this translates to allocating scarce resources in a way to keep other unit heads happy in the short run, rather than working toward the company's long-term strategic goals. One such goal, for example, is compatibility and connectivity. Yet sometimes they are compromised in order to get a better rating.

2. Ratings Lead to Wasted Time.

One precious resource that gets misallocated in the pursuit of ratings is executive time. "Ratings politicize the process and I have to spend a lot of my time in unproductive ways," noted the I.S. executive. "Small units get a disproportionate share of my time, but since the averages are not weighted, I have no choice. Both R&D and I.S. are involved in Artificial Intelligence and as long as R&D considers I.S. unwelcome competition, we will never get a good rating from it. Then we have all kinds of groups:

- Some are against automation, computer-aided design and all the things we stand for;
- Some want to do everything their own way: buy their own computers, do their own maintenance, develop their own software; and
- Some don't understand our strategic objectives.

"Yet I have to spend time with them, court them, take them out to lunch, work through their hang-ups, counter-balance the negative input they may have gotten from their people—all just to get a better rating, and perhaps only because they now like me more. After all that, how much time and energy will I have left to do the work that is really important?"

3. Ratings Lead to Distorted Decisions.

"We had a big battle with one of our operating companies. It wanted a word processor of a certain brand. We did an extensive analysis, looking at compatibility, standards, training time, and our long-term plans, and another brand was clearly superior. We resisted the pressure, stood our ground—but in the process created a lot of animosity. The easiest thing for me to do would have been to give in and let the operating company buy what it wanted; my rating from it would have been better. And quite frankly, that is exactly what I have done in a couple of other cases. I simply rolled over and said: 'If it is so important to you, go ahead.' It was wrong but we are only human and we can afford only so many enemies."

4. Ratings are not Compatible with a Cooperating Mentality.

"Ratings create barriers, tension, an adversary environment, an 'us-against-them' mentality, a zero-sum game among the departments. This is precisely what we are trying to get away from. We are trying to create a partnering atmosphere, a spirit of cooperation and trust, a sincere desire to work closely together toward long-term corporate objectives. Ratings stand in the way of achieving such synergies." The executive concludes the case against ratings by saying: "We should spend less of our energy on looking good and more of it on being good." Finally, likening the atmosphere the company seeks to other long-term relations based on trust, he asks: "You don't rate your spouse, do you?"

Chapter 1

Surveys: Incidence and Purposes

Forty percent of the participating companies conduct I.S. user satisfaction surveys of one kind or another. In general, user satisfaction surveys appear to be less popular among European companies. However, many of the European companies polled that currently do not survey are considering it or are about to launch surveys.

Incidence

Among the firms polled, there were no striking variations in the percent using surveys by industry (see Chart 1).

The correlation between company size and the incidence of surveys is as clear as it is predictable (see Chart 2).

Only in the largest size category, annual sales of over \$5 billion, do a majority of the participating firms conduct I.S. user satisfaction surveys.

Why Companies Survey

Most companies conducting surveys have more than one purpose in mind (see Table 1).

Making I.S. more responsive to users is not only the most common but also the most important purpose of these surveys. The least important, as well as the least frequently mentioned, is to help evaluate the performance of I.S. personnel.

Other reasons for conducting user satisfaction surveys include:

- Assessing user expectations;
- Identifying new requirements; and
- Assessing the impact of specific programs (see Table 2 p. 6).

Table 1: Purpose of Survey

	Percent of 115 Companies Conducting Surveys
Make I.S. more responsive to users.	87
Identify dissatisfied users.	72
Pinpoint problem areas in specific I.S. units.	72
Monitor progress over time.	66
Assess priorities and resource allocation.	51
Help in evaluating the performance of I.S. personnel.	42

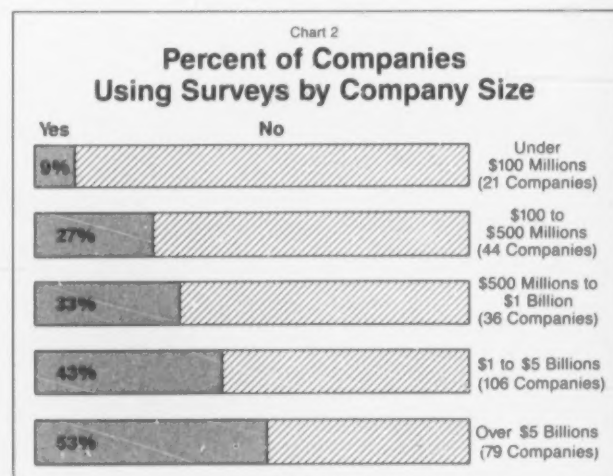
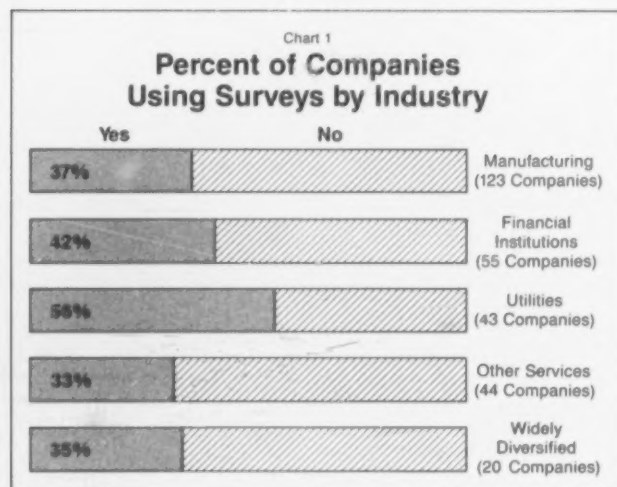


Table 2: Importance of Purposes

	<i>Importance (Average Score*)</i>	<i>Frequency of Mention as a Purpose (Table 1)</i>
To make I.S. more responsive to users.	-1.4	1
To pinpoint problem areas in specific I.S. units.	2.0	3
To monitor progress over time.	2.0	4
To identify dissatisfied users.	2.2	2
To assess priorities and resource allocation.	2.3	5
To help in evaluating the performance of I.S. personnel.	2.7	6

* 1 = very important, 5 = not important

As noted, less than half the surveys are used in the performance evaluation of I.S. personnel. One firm that uses its survey for that purpose is a large insurance company, whose I.S. executive explains:

"Each year my boss and I agree on reaching a certain level of user satisfaction. How well I do will represent 20 percent of my performance measurement for the year. In turn I agree with each of my unit heads on a numerical objective for user satisfaction as it pertains to their area. This gives me valuable information about the quality of my people's work, their customer orientation, and their overall performance."

The head of I.S. for a large oil company, on the other hand, dismisses the use of surveys for performance evaluation. "If you wait till the annual survey to find out that an employee did not do what he or she was supposed to do, then you are not doing your job as supervisor in monitoring the work under you."

Those companies that use surveys for performance measurement tend to use them at least at two levels: for the head of I.S. and for the unit heads reporting to that person. In a few cases the ratings are even used to evaluate project leaders, functional I.S. managers, or all management employees in I.S. In these companies, 40 percent tie pay increases or bonuses directly to the ratings. In four out of five companies survey ratings count for less than 20 percent of the evaluation and pay action; in one out of five they count for 20 percent to 40 percent.

Chapter 2

The Survey Process

The survey instrument is, needless to say, the heart of the satisfaction survey.

The Survey Instrument

Survey instruments vary highly in length (for samples, see Appendix). States the director, corporate systems of a manufacturing firm: "Most users don't want to be bothered, so we keep it simple—and to one page. If we went to three pages, our response rate would probably drop to 10 percent." By contrast, a large public utility just completed a 28-page questionnaire (including instructions), single-spaced, with some pages requiring up to 280 ratings².

Virtually no survey is either completely quantitative or completely qualitative. Most are a mix of the two, although proportions vary. One company that employs a 1 to 5 scale (1 is the highest rating) has a rule that ratings of 4 or 5 must be accompanied by an explanation. (This is to uncover problems, although, according to cynical users, it also serves to discourage low grades.)

There are two concerns about survey content. One is that it may reflect the perspective of I.S., not that of the users. ("In order to truly measure satisfaction, the survey should cover points that are important to the *user*, not what I.S. *thinks* is important," as one user notes.) It is for this reason that some companies consult users in the construction of the questionnaire. Others have respondents rate the survey instrument itself and/or ask them how they would improve it.

The other concern is that the survey instrument may be biased, intentionally or otherwise, to elicit good news and/or suppress bad news. Some respondents believe that, apart from any bias, designing a questionnaire is a job for a professional researcher, and some companies retain outsiders for this purpose.

As a memory jogger, some firms attach a list of the major projects done for each respondent in the previous year to remind users what it is they are supposed to be judging.

User Participation and Response

There is wide variation among those polled regarding the choice of user satisfaction survey participants, the number

of questionnaires distributed, the response rate, whether responses are signed and the help, if any, respondents get from their subordinates in completing the survey.

When the survey is sent to, say, 50 or fewer people, they tend to be vice presidents or department heads. Other com-

A Simple Survey

Even a small, not-for-profit organization with only a few dozen management employees may employ user satisfaction surveys. For example:

Report No. _____

Send To: _____

Room No. _____

*****DATA PROCESSING CUSTOMER *****
FROM TIME TO TIME WE LIKE TO REVIEW THE
EFFECTIVENESS OF THE SERVICE WE PROVIDE.
PLEASE REVIEW THE ATTACHED COMPUTER OUTPUT
AND ANSWER THE FOLLOWING QUESTIONS:

*****PLEASE NOTE *****
IF YOU HAVE COMPLETED ONE OF THESE CARDS
WITHIN THE LAST 30 DAYS, PLEASE DISREGARD!

- *****
- ___1. IS THIS REPORT STILL REQUIRED?
 - ___2. IS THE DATA ON THE REPORT CORRECT?
 - ___3. IS THE PRINT QUALITY SATISFACTORY?
 - ___4. IS THE "SEND TO" INFORMATION ON THE TOP OF THIS CARD CORRECT?
 - ___5. WAS THIS REPORT DELIVERED TO THE CORRECT LOCATION?
 - ___6. WAS THIS REPORT DELIVERED ON TIME?
- WE WILL CONTACT YOU IF YOU REPLIED "NO" TO ANY QUESTION!

NAME: _____ EXT. _____

*****RETURN THIS CARD TO:*****

*****THANKS! *****

²At least two companies conduct their entire survey electronically—the European branch of a large computer manufacturer and a U.S. utility.

panies spread their nets wide to encompass more than one organizational level:

"Any person who signs on to an on-line business system is asked to complete the survey."

One respondent company with a lengthy questionnaire surveyed 1,000 employees (out of a total of 3,400); everybody who came into contact with I.S. (received a report, used the Information Center, got training) was invited to participate. Some companies deliberately create a heterogeneous survey population. According to one I.S. chief, getting feedback at the working level as well (virtually from every management employee) provides I.S. with information that is not filtered through department heads. His view is corroborated by an I.S. executive who, in his previous position as a user, observed how the raw input got sorted, sifted and often whitewashed in departmental meetings of users before being passed on to I.S.

Having a relatively small number of high-level respondents raises the question of whose experience and opinions are, in fact, reflected in the responses, given that the respondents tend to be light users of I.S. While practices vary, department heads often have one or more subordinates complete the survey; in the latter case they consolidate the results. Sometimes the response is a product of a departmental meeting. Even where the department head completes the questionnaire alone, it tends to reflect the judgment of subordinates, absorbed by the department head throughout the year.

Finally, some companies conduct surveys of more than one kind, each one with different respondents.¹

"For our regular, big annual survey we carefully select managers to participate. Then, periodically we send out short questionnaires to many people, using our newsletter mailing list, for example."

One company has the I.S. staff rate itself, too:

"Our survey is also completed by I.S. personnel; they rate the services they provide. The differences between the perception of users and the self-perception of I.S. are noted. The knowledge of whether and where such differences exist is very helpful in developing joint action plans."

Policies on requiring the respondent to sign the survey vary and are often flexible. Some I.S. executives recognize that requiring a signature may make some respondents overly cautious—although few complain about the reticence of users to make their views known. Most cite the importance of follow-up and corrective action to support the signing of responses. In addition, as one I.S. executive put it: "Anonymous replies frustrate and their complaints are impossible to verify."

¹In some cases a divisional I.S. unit completes a survey on and rates the support it gets from the central I.S. department.

Dissemination of Results

When the unit conducting the survey gets the form back from users, the next step is to aggregate and analyze the results. Most companies use simple averages; others weight the ratings. The most common weighting factor is the size of the unit, measured in sales volume if it is a business, or in the number of users if it is a staff department. Some firms use the user's degree of involvement with a given service as the weighting factor. A few companies base the weighting on the rank of the respondent; for instance, a vice president's "vote" equals the votes of two directors or four managers.

A summary of the results is usually reported at least to the executive to whom the head of I.S. reports. In some cases, however, the distribution is wider and includes other senior executives or divisional heads.

As a rule, only the quantitative measures reach higher levels. Comments from users are included only in exceptional cases. In a number of participating firms all survey respondents receive a summary of the results. Results are also disseminated down within the I.S. organization. Typically, each unit within I.S. receives all the quantitative and qualitative feedback pertaining to it. At this level, of course, the comments are very important, not only for informational purposes but also for follow up with individual respondents.

Follow-Up

Many feel that the follow-up is the most valuable part of the survey. The usual policy is to follow up with every user who had a complaint or negative comment. In addition, some companies choose to follow up even in the absence of comments if the rating is below average.

Follow-up is also necessary for the viability of future surveys. According to one I.S. executive: "We try to close the loop on feedback. If the users think that their replies go into a big black hole, they get turned off and they will stop cooperating."

Another commented:

"To continue participating, users must believe the I.S. department is serious about following up on the criticized items. One way for I.S. to do that is to prepare a written action plan following the survey and review it with the user."

A manager of accounting services of a large insurance company makes these points:

"Before a survey is conducted there has to be a commitment at the top that, unless the ratings are the highest, some action will follow; if no action is expected, the survey does more harm than good and should not be undertaken. Explanations of why there is no action (dumb idea, no budget), while better than nothing, are not substitutes and leave users more dissatisfied than before."

One company has a relatively pleasant problem: "Follow-up is crucial, but, ironically, it is more difficult as you improve; with consistently excellent ratings, there is just not that much to talk about."

Chapter 3

The Anatomy of Surveys

Most companies have well-established policies, procedures, and forms for various aspects of the survey. (At least one firm has these embodied in its policy manual.)

Who Conducts the Survey?

While in most companies the I.S. unit itself conducts the survey, this is not the universal practice, as Table 3 shows.

Some companies distance the I.S. department from the conduct of the survey. One way is to farm it out to an outside firm. Sometimes a survey done by an outsider is part of a broader investigation. One respondent explained, "Currently a consultant on quality improvement is polling our I.S. users." Another notes, "Our user survey was conducted by an outside consultant while performing a management audit."

Another, perhaps less expensive, way to assure independence is to entrust the survey to another department of the company. Market research seems to be the most logical choice; in addition to independence, that option ensures professionalism in carrying out the survey.

Some companies use an impartial sub-unit of the I.S. department itself. According to a large financial services company:

"We have a Customer Service Department within I.S. Its job is to act pretty much as user advocates in dealing with the rest of I.S. It is an independent group, it talks to users and usually supports what they want. The survey goes back to this Customer Service Department. This way users can

Table 3: Who Conducts the Survey?

(Percent of 115 Surveying Companies*)

I.S. Unit	82%
Other Department ¹	11%
Outside Firm	12%

*The total exceeds 100 percent due to multiple responses

¹Planning Department, Human Resources, Quality Control, and Market Research were mentioned.

be more open than they would be if the managers providing the service sent out the questionnaire and it went back to the same managers. This unit tabulates the results and adds its own comments. For instance, if it notices that a user rated the printers poorly, it will investigate and validate the problem, it will talk to both the user and the I.S. manager involved and will add its comments and recommendations accordingly."

The I.S. Units the Survey Covers

Most of the participating companies that conduct surveys, both in North America and in Europe, do so at the divisional level (although not necessarily at *all* divisions) as well as at headquarters. If only one organizational level is surveyed, however, it is twice as likely to be the corporate level as the divisional level. Some firms conduct surveys at two or more levels, and occasionally encounter problems with this: "Central I.S. is often confused with local or divisional units and therefore it is difficult to attribute the feedback to a specific I.S. organization."

What is Measured?

Responsiveness of I.S. is the only attribute that is almost universally measured by the surveys both in North America and in Europe.

Table 4: What is Measured?

	Percent of 115 Companies*
Responsiveness	92%
Timeliness	87
Quality	86
Cost	59
Other ¹	22

* The total exceeds 100 percent due to multiple responses.

¹Problem resolution, equipment installation, meeting commitments, leadership, innovation, working relationships, communication, understanding user requirements.

Timeliness and quality are also covered by almost nine out of ten surveys. For many users, especially in North America, I.S. cost is a sore point: "The cost issue is always predominant. We have tried very hard to communicate how we develop our costs and what is included in them, but still this is one item on which we usually get very low marks."

Frequency

Seventy-nine percent of the companies conduct surveys at more or less regular intervals, ranging from one month to two years, with annual surveys being by far the most common. One-third of the companies conduct ad hoc surveys, with 12 percent doing both kinds.

The advantage of regular surveys, as one respondent said, is that "the resulting information can be tracked over time." Annual surveys, some note, are also helpful in the planning process. However, the annual survey may tax users' memory and bias the rating: "Customers tend to focus on the most recent experience (good or bad) when rating services." Thus some I.S. executives favor ad hoc surveys, especially on development (programming) projects, that coincide with the completion of a job. Others survey participants on the completion of training classes.

However, some companies that conduct ad hoc surveys after project completion are concerned about going too far.

"We got some feedback from some of our users to the effect that 'Please don't send me those surveys anymore.' So we are planning to decide on a breakpoint on projects, like 25 man days, under which we will not send out the questionnaire."

Table 5: Frequency of Surveys

Percent of Surveying Companies*		
<i>Regular Intervals</i>		79%
Annual	53%	
Quarterly	6%	
Other ¹	20%	
<i>Ad Hoc</i>		33%

*The total exceeds 100 percent due to multiple responses.

¹Biannual, semiannual, monthly.

Survey overload can also be a problem with regular surveys. To avoid such frustration, one I.S. executive has initiated a system whereby the frequency of the survey varies with the ratings: User departments that rate I.S. very poorly are surveyed monthly until the grades improve; user departments that rate I.S. higher are surveyed only annually. (However, this, too, can be a subtle discouragement to low ratings.)

Another I.S. chief uses a three-year rotating cycle so that the annual survey does not go to the same users each year. Another executive asserts that quarterly surveys are not only burdensome for users but unnecessary: "I.S. is a big ship that you should steer slowly and, except in a crisis, annual surveys are sufficient for that." These concerns about frequency are probably not misplaced. One user's response to the question on how frequent I.S. surveys are in his company was: "It seems to me like they are going on all the time."

Chapter 4

The Usefulness and Uses of Surveys

It is not surprising that most of the companies that conduct user satisfaction surveys find them useful. Once started, surveys change and usually expand, but relatively few are discontinued. (Only 11 percent of the 292 companies surveyed reported discontinuing them.)

How Useful are Surveys?

Almost one in three rate the surveys extremely useful.

Companies that use the surveys for performance measurement find them significantly more useful than those that do not.

There is general agreement that both the quantitative and qualitative parts of surveys are useful, although to different degrees to different companies. One executive likens the importance of quantitative input to the instrument panel of an airplane: "Without ratings we would be flying blind."

Another emphasizes the qualitative: "Numeric responses alone are much less satisfying than getting specific feedback

and suggestions. To me the comments are the most valuable part of the survey."

They are also the most demanding part for the user. Says a third executive: "The numbers are easy. Comments require thought and signature requires even more thought."

Changes Resulting from Surveys

Most participating companies report having made at least some changes on the basis of the surveys. Many of the changes have institutionalized better communication between I.S. and their users, by a variety of devices, including:

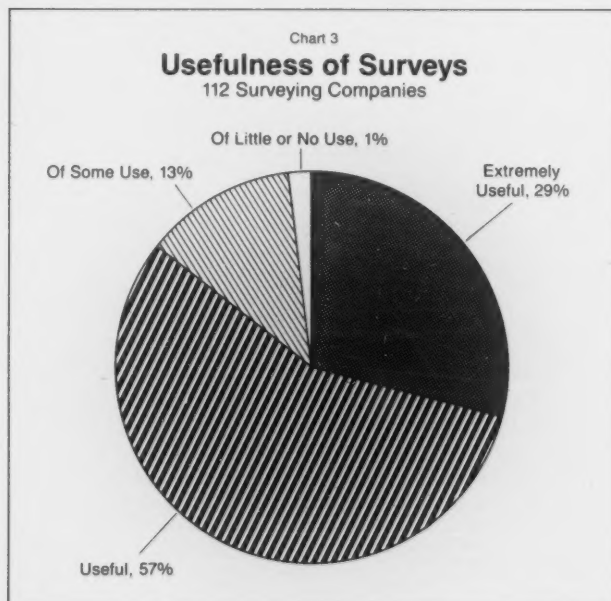
- Problem management procedures;
- "Help lines" and "help desks" to make it easier to find the right person to resolve the problem;
- Newsletters and bulletins for users;
- User advisory groups; and
- Creation of position of I.S. account manager for liaison with users.

Surveys are credited with helping to change the perspective of I.S. staff, leading to a better understanding and appreciation of users' viewpoints about services as mundane as the timely delivery of reports. One participant relates this experience:

"Our Data Center produces many time-sensitive reports. We used to measure our performance by when the reports leave the Data Center. When complaints persisted about late delivery, we undertook a study of the whole delivery system and found that the delays were in the mailroom. Now, users neither know nor care why the reports are late, so we have had to revamp the whole distribution system from the Data Center to the user to assure user satisfaction."

"Ratings force managers to take an interest in what is happening beyond their four walls; they look at their job from a broader perspective—from the perspective of the users and how our contribution ultimately affects their performance."

Changes in I.S. attitude are considered the most significant impact of surveys.



In some firms, enlarged perspectives for I.S. have produced far reaching changes. At one company, "We instituted a program to enhance the consulting skills and business knowledge of our analysts and programmers. When they start a job, they will know something about the business they are supporting before they begin coding."

Many firms have made organizational changes, including :

- Reorganizing I.S. to improve responsiveness to customers;
- Decentralizing PC and terminal provisioning; and
- Establishing I.S. customer service organizations.

Shifting resource allocation and priorities often result from the surveys:

- "We decided to postpone indefinitely a major system upgrade and, instead, to initiate a more important development."
- "Our firm changed computer resource allocation to improve response times."

- "We increased hours of weekend service."
- "We achieved faster acquisition of PC software by reducing the level of approval authority."

Other results flowing from I.S. satisfaction surveys are personnel reassignment, early warning and prevention of problems, and changes in cost allocation or chargeback systems.

Some chronic shortcomings unearthed by the surveys can be alleviated only by increased resources. But when total resources are fixed, they must be diverted, sometimes from areas that enjoy high user satisfaction. To pull this off successfully requires tact and diplomacy: If the users find out that high ratings can lead to reduced service, they might lower them. To be sure, when it is necessary to cut the I.S. budget, relative satisfaction levels can provide useful clues as to where the reductions would hurt the least.

In some cases, however, even without the need to shift resources or cut budgets, it might be found that some extremely high levels of service, and therefore high levels of user satisfaction, are not cost-effective; in other words, a satisfaction level can be *too* high. Therefore some companies think in terms of a trade-off, taking into account the *cost* of "buying" more satisfaction.

Chapter 5

Measuring Satisfaction Without Surveys

The majority of executives polled (60 percent) have not instituted formal user surveys. Their reasons for this are varied and so are the alternatives they employ.

Reasons for not Surveying

Non-surveying companies consist of (1) those that have tried surveys but abandoned them, (2) those that have considered them without trying them, and (3) those that have not considered surveys. They break down as follows:

Never considered surveys	40%
Considered but have not tried	41%
Have tried	19%

Those who have abandoned surveys mention problems such as vague results and user impatience. Among those who have never used surveys, there are a few that simply do not find value in them. Says one executive: "We invest all available time and money in the project itself instead of creating statistics."

For others, establishing the formal survey process is not a high enough priority. Some see the time and cost as outweighing the benefits. But the most common objection is that surveys are a poor substitute for direct communication:

- "The more open an organization, the less need there is for surveys. The ideal is to get the feedback on a continuing basis."
- "Surveys will not substitute for effective communication at all levels across both I.S. and user organizations. If you are doing this well, you don't need the surveys."
- "If you need surveys to determine satisfaction, you do not really know your operation, or the people under you are not talking to users."

Another view is that surveys are unnecessary because I.S. can rely on users to voice their dissatisfaction.

- "If our users were not satisfied, they would let us know."
- "Our user community is not shy about reporting shortcomings in our service to them."

(At least one I.S. executive disagrees with this philosophy and deems a dialog triggered only by complaints harmful: "Currently we get feedback from users on our service only when they have problems. This creates an unbalanced perspective on I.S. An objective survey would redress the balance and provide useful material for I.S./business discussion.")

Some executives say I.S. is so close to the user that surveys would be superfluous. "We have decentralized I.S. and each user controls his own services. Therefore the user uses only the services he needs and gets what he wants."

Others suggest that where the relationship is at arms length, based on contracts, surveys are not needed. States the I.S. executive of one company where users can award projects to internal I.S. or outside contractors: "In our case the primary indicator of user satisfaction is the user's willingness to contract with I.S. for additional systems development and/or operational services. These negotiations occur several times a year with each user, and failure to agree to new business nearly always indicates dissatisfaction."

Finally, there is a small group of companies whose I.S. executives admit that, at least at this point, the satisfaction of their users is something they would rather not measure. "We have not undertaken a survey because we know we are over-stretched and a survey will not cause management to invest more in I.S." And then there is the rueful answer of one discouraged I.S. executive: "There is no satisfaction to measure."

Alternatives to Surveys

Companies that do not conduct user satisfaction surveys are by no means insensitive to or uninterested in the reaction of their users. Sixty-three percent of these companies employ other methods of capturing the opinion of users (methods also adopted by many surveying companies). The arsenal they have developed for that purpose is varied, with many firms using more than one device.

One method is simply relying on frequent contact. A second method formalizes such face-to-face contact with users by regular meetings.

- "I.S. meets with the head and staff of each user organization monthly to discuss progress against plan."

- "We meet with each client quarterly to review results and satisfaction, and to discuss improvements."
- "We conduct annual interviews with key executives as part of our planning cycle to review accomplishments, identify areas for improvement, and establish objectives."

At some companies, instead of talking to users on a department-by-department basis, I.S. invites users from various departments to form a focus group. Usually I.S. supplies the moderator but some companies use outside consultants. In one firm, I.S. management attends user department staff meetings on a regular basis.

Another company stresses the value of mixing the level of participants:

"We use what we call a diagonal slice, a hierarchy of people. It might be a manager in one department, a supervisor in another, and an analyst in a third. We get wonderful interaction this way, which is very useful to us."

Still another approach is to designate a person or unit to elicit user experience and opinions, and channel the feedback to I.S. This may be accomplished through a database administrator, a customer service unit, a user liaison committee, or user coordinators on the staff of I.S.

In many cases this coordinating role is performed by a steering committee whose main mission is to give guidance to I.S., set priorities, and in some cases approve operating and capital budgets. One company relies on a standing committee for measuring user satisfaction.

"We formed an EDP Resource Allocation Committee, composed of the seven Area Managers and the President, who is the Chairman. Each Area Manager prepares an EDP Project Request List (in priority sequence) which complements his/her strategic planning goals. The Data Processing Division reviews the list and provides a preliminary man month estimate for each project. Each Area Manager has full control over which projects Data Processing will undertake. Quarterly status review meetings are held to discuss our progress and obtain feedback from the Area Managers on any significant problems or changes in priorities."

Another group of corporations uses service-level objectives (often embodied in written commitments or "contracts") and considers monitoring performance an adequate substitute for user satisfaction surveys. For example:

"The Computer Operations Department has service-level contracts with all users. Each contract stipulates the application processing goals (starting time, completion time, and sys-

Managing Without Surveys

One company's practice illustrates the rich variety of methods non-surveying firms employ to measure satisfaction.

"We have no formal user satisfaction surveys, but users can express their opinions about I.S. systems in different ways:

1. In the planning process the Information Plan team conducts a substantial number of user interviews.

2. For each activity periodic review meetings take place, where managers from the I.S. meet to discuss matters of common interest. The chairman of this steering committee is the head of the corresponding user department. Information from the users at the unit is gathered by a user coordinator.

3. The development of I.S. applications is based on a project team with the participation of user groups, an I.S. analyst, programmers, a data administration representative, and others. This provides continuous user feedback."

tem availability percentage) in a formal, written document signed by both parties. Yearly, the performance of the Operations Manager is evaluated, taking into consideration the availability percentage mutually agreed upon for each application, including on-line systems."

It is to be noted, however, that the measurement of service levels is more common among surveying companies (73 percent) than non-surveying companies (56 percent). Also, some executives maintain that surveys measure perception—service-level monitoring does not. A few even find useful clues in the discrepancy between the two.

Some firms, as noted earlier, rely on spontaneous negative feedback: They use complaints to gauge user satisfaction. At least one of them is even formalizing the process. "We are in the process of developing a user complaint form that would be completed and directed to the head of I.S."

Finally, some I.S. executives have still other ways to get the benefit of surveys without actually having them. "We are developing critical success factors for I.S. and a method for measuring performance against them."

Many companies, however, while doing some of these things, also conduct surveys, leaving no stone unturned.

"We don't want to get locked into any one method. We have written surveys, focus groups led by I.S., focus groups led by consultants. In this amorphous area you need to gain insight and find out how you are doing every way you can. Also, by varying the method, the process does not get stale and we always have a fresh way of looking at things."

Appendix
Survey Forms

Exhibit 1
A Short European Survey



digital

1988 INFORMATION SERVICES CUSTOMER SURVEY

Name: _____ Location: _____ Telephone: _____

Function (Please fill in one box)

- | | | | | |
|------------------------------------|------------------------------------|--|-------------------------------------|--------------------------------------|
| ☐ SALES | ☐ MARKETING | ☐ FIELD SERVICE | ☐ SWAS | ☐ ED SERVICES |
| ☐ CSS | ☐ FINANCE | ☐ HUMAN RESOURCES | ☐ A&L | ☐ IS |
| ☐ MFG | ☐ ENG | ☐ CAS | ☐ COMMERCIAL | |
| ☐ PROD MGMT | | ☐ CMO | ☐ LAW | |

HOW DO YOU RATE OUR PERFORMANCE DURING THE PAST TWELVE MONTHS?

What is your opinion of Information Services (IS) in each of the following areas? Please indicate your answer to each question by filling in, with black pencil, the box below the number which best expresses your opinion. If you have not used a particular service, please fill in 11 (Not Applicable).

Right
—

Wrong
X

Very poor
(0 - 2)

Poor
(3 - 5)

Good
(6 - 8)

Very good
(9 - 10)

Not applicable
(11)

1. The availability of IS personnel to respond to your requests?
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11
2. The attitude and manner of IS personnel responding to your requests?
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11
3. The time it takes IS to service your requests?
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11
4. The quality of support and advice you get from IS?
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11
5. The effectiveness of IS management in addressing your needs?
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11

Comments you would like to make to Questions 1 to 5? _____

6. The AVAILABILITY and QUALITY of the COMPUTING SERVICES you use (in normal working hours)?

- a) ELECTRONIC MAIL
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11
- b) VTX
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11
- c) PRINTING
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11
- d) NETWORK
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11

7. The AVAILABILITY and QUALITY of the TELEPHONE SYSTEM you use?

- ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11

Comments you would like to make to Questions 6 and 7? _____

8. The SUITABILITY of the END-USER COMPUTING PRODUCTS provided for

Very poor
(0 - 2)
Poor
(3 - 5)
Good
(6 - 8)
Very good
(9 - 10)
Not applicable
(11)

a) WORD PROCESSING 0 1 2 3 4 5 6 7 8 9 10 11

b) GRAPHICS 0 1 2 3 4 5 6 7 8 9 10 11

c) SPREADSHEETS 0 1 2 3 4 5 6 7 8 9 10 11

d) DATA ANALYSIS & REPORTING 0 1 2 3 4 5 6 7 8 9 10 11

e) ELECTRONIC CONFERENCING 0 1 2 3 4 5 6 7 8 9 10 11

9. The RESPONSE TIME AT your terminal? 0 1 2 3 4 5 6 7 8 9 10 11

Comments you would like to make to Questions 8 and 9? _____

10. Please suggest how we can improve the services we currently provide _____

11. Are there additional services you would like INFORMATION SERVICES to provide? _____

Exhibit 2,
The Survey of A Utility with Weighted Ratings

INFORMATION SYSTEMS DEPARTMENT
1988
CLIENT SATISFACTION SURVEY

Survey Participants:

We need your help in measuring the level of service that you feel Information Systems has provided during 1988. The information gathered through this survey will give us a better understanding of how Information Systems is meeting your business needs so that we can focus our attention on those areas where improvements are needed. Your cooperation and attention toward the completion of this survey is appreciated.

In the first column of the survey, please assign a weight to each question based on its level of importance to you. Use a scale of 1 to 3 with 3 representing high importance and 1 representing low importance.

Respond to the questions using the following rating scale:

- Excellent — Exceptional performance. Accomplishments go far beyond normal expectations; clearly unique achievements.
- Good — Accomplishments are above expectations and indicate additional effort in meeting client needs.
- Average — Accomplishments consistently satisfy expectations.
- Fair — Accomplishments are minimally acceptable. Some improvement is desired.
- Poor — Accomplishments are frequently unacceptable. Immediate improvement is required.
- N/A — Not applicable or no opinion.

We would appreciate any comments you feel are appropriate to clarify your response or to call attention to other areas of concern. If there is not enough room on the survey form for all your comments related to a particular question(s), please feel free to attach additional sheets as needed.

A report of the compiled responses to this survey will be shared with you early in 1989.

Thank you for your time and cooperation.

Sincerely,



Dale S. Horton, Director
Information Systems Business Services

Department: _____ Location (check one): ☐ General Office ☐ Non-General Office

Position (check one): ☐ Management ☐ Professional/Technical ☐ Clerical

Weight

Excellent Good Average Fair Poor N/A

☐ 1. How would you rate mainframe processing of batch jobs in:

• timely completion of batch work	☐	☐	☐	☐	☐	☐
• quality of batch output overall	☐	☐	☐	☐	☐	☐
• distribution of batch output	☐	☐	☐	☐	☐	☐
• online viewing of reports	☐	☐	☐	☐	☐	☐

Comments _____

☐ 2. How would you rate mainframe processing for online systems in:

• response time for online work	☐	☐	☐	☐	☐	☐
• the amount of time online systems are available	☐	☐	☐	☐	☐	☐

Comments _____

☐ 3. How would you rate the Client Help Desk in:

• courtesy	☐	☐	☐	☐	☐	☐
• knowledge	☐	☐	☐	☐	☐	☐
• promptness in resolving problems	☐	☐	☐	☐	☐	☐
• communications skills	☐	☐	☐	☐	☐	☐

Comments _____

☐ 4. How would you rate the development of applications programs in the following areas:

• quality of the product delivered	☐	☐	☐	☐	☐	☐
• completion of work on schedule	☐	☐	☐	☐	☐	☐
• communications between you and the programming staff	☐	☐	☐	☐	☐	☐

Comments _____

☐ 5. How would you rate the operational support of production applications in the following areas:

• technical ability of support personnel	☐	☐	☐	☐	☐	☐
• promptness of support personnel in resolving problems	☐	☐	☐	☐	☐	☐
• commitment to meeting established schedules	☐	☐	☐	☐	☐	☐
• communications between you and the programming staff	☐	☐	☐	☐	☐	☐

Comments _____

☐ 6. How would you rate Information Systems training in the following areas:

• courses available	☐	☐	☐	☐	☐	☐
• timely scheduling of courses	☐	☐	☐	☐	☐	☐
• material covered	☐	☐	☐	☐	☐	☐
• methods used	☐	☐	☐	☐	☐	☐
• knowledge and presentation skills of instructor	☐	☐	☐	☐	☐	☐

Comments _____

☐ 7. How would you rate Information Systems' communications in:

• clarity and ease of understanding	☐	☐	☐	☐	☐	☐
• method of distribution	☐	☐	☐	☐	☐	☐
• timeliness	☐	☐	☐	☐	☐	☐
• reaching the appropriate audience	☐	☐	☐	☐	☐	☐
• supplying needed information	☐	☐	☐	☐	☐	☐

Comments _____

☐ 8. How would you rate Information Systems in:

• the process of obtaining menu equipment	☐	☐	☐	☐	☐	☐
• the process of obtaining menu software	☐	☐	☐	☐	☐	☐
• the installation of equipment at the work location	☐	☐	☐	☐	☐	☐
• the timeliness of installation	☐	☐	☐	☐	☐	☐
• clarity and ease of use of Information Systems Resource Request (ISRR)	☐	☐	☐	☐	☐	☐

Comments _____

Weight: 3-2-1 (high importance to low importance)

Weight

Excellent Good Average Fair Poor N/A

Excellent Good Average Fair Poor N/A

17. How would you rate the following areas in:

the process of
obtaining products/services

the products delivered

☐	• Printing Services	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	• Graphic Arts	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	• Word Processing	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	• Central Dictation	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	• Copy Services	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	• Reprographics	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	• Corporate Micrographics (microfilming from paper copy)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	• Corporate Forms Management	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	• Corporate Records Management	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐	• I/S Library	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments _____

☐	18. How would you rate Information Systems personnel overall in:	☐	☐	☐	☐	☐	☐	☐	☐
	• courtesy	☐	☐	☐	☐	☐	☐	☐	☐
	• knowledge	☐	☐	☐	☐	☐	☐	☐	☐
	• promptness in resolving problems	☐	☐	☐	☐	☐	☐	☐	☐
	• oral communication skills	☐	☐	☐	☐	☐	☐	☐	☐
	• written communication skills	☐	☐	☐	☐	☐	☐	☐	☐
	• ability to meet your business needs	☐	☐	☐	☐	☐	☐	☐	☐

Comments _____

☐	19. How do you feel Information Systems is meeting your business needs in:	☐	☐	☐	☐	☐	☐
	• technology	☐	☐	☐	☐	☐	☐
	• guidance	☐	☐	☐	☐	☐	☐

Comments _____

☐	20. How would you rate Information Systems overall?	☐	☐	☐	☐	☐	☐
	Comments _____						

☐	21. How would you rate this survey?	☐	☐	☐	☐	☐	☐
	Comments _____						

22. What suggestions do you have for improving the quality of products and services provided by Information Systems?

Signature (optional) _____

Weight: 3-2-1 (high importance to low importance)

Weight

Excellent Good Average Fair Poor N/A

☐	9. How would you rate the Information Center in:						
	• layout and usefulness of facilities	☐	☐	☐	☐	☐	☐
	• availability of consultants to answer questions and help solve problems	☐	☐	☐	☐	☐	☐
	• business knowledge of consultants	☐	☐	☐	☐	☐	☐
	• technical knowledge of consultants	☐	☐	☐	☐	☐	☐
	• courtesy of consultants	☐	☐	☐	☐	☐	☐
	• prompt resolution of problems	☐	☐	☐	☐	☐	☐
	• value of IC Newsletter	☐	☐	☐	☐	☐	☐
Comments							
☐	10. How would you rate the Product Counter in:						
	• sufficiency of products available	☐	☐	☐	☐	☐	☐
	• ease of obtaining products	☐	☐	☐	☐	☐	☐
Comments							
☐	11. How would you rate Information Systems Security Services in:						
	• providing for security of data from unauthorized access	☐	☐	☐	☐	☐	☐
	• timely response to questions	☐	☐	☐	☐	☐	☐
	• satisfactory resolution of problems	☐	☐	☐	☐	☐	☐
	• courtesy of personnel	☐	☐	☐	☐	☐	☐
Comments							
☐	12. How would you rate IRUM (Information Resource Usage Management) on:						
	• usefulness in managing computer resources	☐	☐	☐	☐	☐	☐
	• adequacy of information provided by reports	☐	☐	☐	☐	☐	☐
	• accuracy of reports	☐	☐	☐	☐	☐	☐
Comments							
☐	13. How would you rate the Products and Services Catalog and Bulletin in:						
	• usefulness in selecting and obtaining products and services	☐	☐	☐	☐	☐	☐
	• detail of information provided	☐	☐	☐	☐	☐	☐
	• ease of understanding	☐	☐	☐	☐	☐	☐
Comments							
☐	14. How would you rate Consulting Services in:						
	• providing consultation and assistance	☐	☐	☐	☐	☐	☐
	• prompt resolution of problems	☐	☐	☐	☐	☐	☐
Comments							
☐	15. How would you rate PROFS (Professional Office System) in the following areas:						
	• response time	☐	☐	☐	☐	☐	☐
	• problem resolution support	☐	☐	☐	☐	☐	☐
	• value of benefits	☐	☐	☐	☐	☐	☐
Comments							
☐	16. How would you rate Mini-PROFS in the following areas:						
	• availability	☐	☐	☐	☐	☐	☐
	• value of benefits	☐	☐	☐	☐	☐	☐
Comments							

Weight: 3-2-1 (high importance to low importance)

Welcome to the I/S User Satisfaction Survey

(December 7th to 18th, 1987)

Our yearly User Satisfaction Survey consists of 10 questions it takes around 5 minutes to answer them.

The purpose of this survey is to help Information Systems to improve the service to you and identify any areas that might be of concern to you.

When you end this survey it will be sent to a special file where any reference to your userid will be dropped so that ALL YOUR REPLIES WILL BE CONFIDENTIAL and information provided by you will ONLY be used to group answers together for analysis purposes.

Feedback on survey results will be available on-line early in the new year and details will be provided to your functional I/S co-ordinator.

If you want to take the survey NOW, hit PF10
If you want to answer LATER, hit PF12
If you do not wish to participate type LEAVE and press ENTER

Please answer as many questions as you can, but remember there are no right or wrong answers. If you do not wish to answer a question or it does not apply to you press PF10 to move on from that question.

You may answer the question in any order you choose by using the PF keys marked below (use PF10 forward, PF11 backward).

You may postpone the survey at any point by pressing PF12 and you can resume it later. You may end at any point by pressing PF3.

IF YOU ARE RESUMING, PICK-UP AT THE QUESTION WHERE YOU LEFT OFF BY TYPING THE QUESTION NUMBER HERE AND PRESS ENTER

Thank you for your cooperation.

YOU ARE NOW READY TO START THE SURVEY. PRESS PF10

...or PF9 for help.

Question 1: User Profile

Answer the question by typing 'X' then press ENTER to register your reply and display question 2.

In which function do you work?

Science and Tech
Market Development
Services and Support
Telecommunications
Business Plans
Finance
Manufacturing
Communications
Finance Services

HQ I/S
HQ Services
S P M
Comm Ind relations
Personnel
Legal
Mid Range
AD / Distribution
EOC members Exec. Off.
(Qual. Org. Trade dev.
and Exec. Resources)

Question 2: User Profile

Answer the question by typing 'X' then press ENTER to register your reply and display question 3.

Please choose from the list below the occupation which matches your job.

Non People Managers

Administrative
Data processing Professional
Secretarial
Technical including OSSS
Program manager
Business Analyst

People Managers

First Line Manager
Second Line Manager
Third and above

Question 3: Importance

Answer the question by typing 'X' then press ENTER to register your reply and display question 4.

How important is information processing to you in doing your job?
Select one of the following:

- 1) Of utmost importance
- 2) Very important
- 3) Of moderate importance
- 4) Of little importance
- 5) Of no importance

Question 4: Satisfaction

Answer the question by typing 'X' then press ENTER to register your reply and display question 5.

Overall, how satisfied are you with the information processing services you use?
Select one of the following:

- 1 = Very satisfied
- 2 = Satisfied
- 3 = Neither satisfied nor dissatisfied
- 4 = Dissatisfied
- 5 = Very dissatisfied

Question 5: Areas For Improvement

Enter up to three numbers from the list below and press ENTER to register your reply and display question 6.

Please select the 3 areas of information processing that you would like to see improved, in order of priority and identify any additional areas not listed.

1	Function :	Menus, helps, facilities of the services	Importance
2	Availability :	System there when you want it?	1st
3	Response time :	How long before system responds	2nd
4	Batch :	Time till output gets to you	3rd
5	Education :	IC seminars, user guides	
6	Usability :	How easy is it to use	
7	Printing :	Availability or turnaround of printers	
8	Support :	X4999, X7000, consultancy etc.	

Please identify any other areas where you would like to see improvements.

1st
2nd
3rd

Question 7: Usage

Answer the question by typing 'X' then press ENTER to register your reply and display question 8.

On average, how much time per week do you work on a terminal (screen, PC Displaywriter)

- Less than 5 hours per week
- 5 to 9 hours per week
- 10 to 14 hours per week
- 15 to 19 hours per week
- 20 to 24 hours per week
- 25 to 29 hours per week
- 30 hours and above.

Question 9: Availability

Enter up to three numbers from the list below and then press ENTER to register your reply and display question 10.

Normal computer hours are Monday to Friday 8:00-to-20:00
Do you have a regular need for access outside these hours?

- | | | | |
|---|---------------------------------|---|---|
| 1. Weekdays before 8:00 | 1 | 2 | 3 |
| 2. Weekdays after 20:00 | You can enter 1, 2 or 3 choices | | |
| 3. Saturday Mornings | | | |
| 4. Saturday Afternoons | | | |
| 5. I have no regular need outside these hours | | | |

Exhibit 4
A Survey Aimed at Senior Executives (Followed By Personal Interview)

SA Strongly Agree
A Agree
? Don't Know
D Disagree
SD Strongly disagree

	S A	A	?	D	S D
1. We do an excellent job of linking our information strategy to our corporate strategy.	1	2	3	4	5
2. Each year we spend more money on information systems and, as a result, the user organizations get significantly better service.	1	2	3	4	5
3. The success of our company is closely linked to our ability to gain competitive advantage using information systems.	1	2	3	4	5
4. We spend too much time and too many resources on maintaining and enhancing our existing systems, and not enough time developing new systems.	1	2	3	4	5
5. General managers, not MIS managers, play the dominant role at HP in the planning of information systems, as part of the overall business plan.	1	2	3	4	5
6. The information systems meet top management's expectations concerning the provision of information required for effective strategic planning.	1	2	3	4	5
7. The information systems groups take an active, assertive role in determining information requirements and proactively meeting those needs.	1	2	3	4	5
8. Information systems at HP have gotten to a point where there is a lot of data available, but little useful information for running the business better.	1	2	3	4	5

SA Strongly Agree
A Agree
? Don't Know
D Disagree
SD Strongly disagree

	S A	A	?	D	S D
9. The information systems groups do an excellent job of listening to and designing appropriate systems for managers at each of the following levels of the organization.					
a. Top management	1	2	3	4	5
b. Middle management	1	2	3	4	5
c. Lower level management	1	2	3	4	5
d. Overall	1	2	3	4	5
10. The information systems groups have very specific and objective ways to monitor and track results, and they report on how well they are achieving against performance targets.	1	2	3	4	5
11. Information systems are complex and always changing; therefore, relative to other business functions, it is very difficult to measure their performance.	1	2	3	4	5
12. The quality of information systems today at HP is significantly worse than:					
a. Competitors' information systems	1	2	3	4	5
b. HP's software products	1	2	3	4	5
c. HP's information systems in 1980	1	2	3	4	5
13. HP's information systems do a good job of meeting:					
a. My personal information needs	1	2	3	4	5
b. HP's information needs	1	2	3	4	5
c. HP's operational needs	1	2	3	4	5
14. The time between recognition of a business need and implementation of an information system solution to meet that need is too long and needs to be improved.	1	2	3	4	5
15. I personally would be willing to help in the direction setting for HP's information systems, and could commit significant time to do so.	1	2	3	4	5
16. Compared to other companies I am familiar with, HP has very effective information systems.	1	2	3	4	5

17. HP's information systems development effectiveness compares favorably with HP's software labs. 1 2 3 4 5
18. For the business programs in which I am personally involved, I believe HP's information systems are a competitive advantage to the company. 1 2 3 4 5
19. HP's information systems are critical to the success of my business strategy. 1 2 3 4 5
20. At HP, information systems should take more responsibility for managing the information systems within the engineering and manufacturing functions. 1 2 3 4 5
21. The following is a list of benefits that could be provided by information systems. For each rank its relative importance in establishing priorities for HP's information systems. Also for each indicate your assessment of the performance of HP's current information systems in providing the benefit.

BENEFIT	Importance					Performance				
	Most				Least	Excellent				Poor
	1	2	3	4	5	1	2	3	4	5
White collar productivity	1	2	3	4	5	1	2	3	4	5
User Productivity	1	2	3	4	5	1	2	3	4	5
HP (external) customer satisfaction	1	2	3	4	5	1	2	3	4	5
Strategic decision support	1	2	3	4	5	1	2	3	4	5
Operational decision support	1	2	3	4	5	1	2	3	4	5
Organizational flexibility	1	2	3	4	5	1	2	3	4	5
Financial control	1	2	3	4	5	1	2	3	4	5
Process standardization	1	2	3	4	5	1	2	3	4	5
Competitive advantage	1	2	3	4	5	1	2	3	4	5
Information quality	1	2	3	4	5	1	2	3	4	5
Information timeliness	1	2	3	4	5	1	2	3	4	5
Asset utilization	1	2	3	4	5	1	2	3	4	5
Sales support	1	2	3	4	5	1	2	3	4	5

Please comment on the following questions.

22. What is HP's biggest unmet information need?

23. What is your biggest problem with HP's information systems?

24. What is the biggest information systems opportunity for HP?

25. How have HP's information systems contributed to HP's new product programs? How could they contribute more?

26. How have HP's information systems contributed to HP's marketing and sales programs? How could they contribute more?

27. What are the most important factors that should be considered in making investment decisions for information systems?

28. What role do you think Information Systems should play in creating a Common Computing Environment for HP?

29. A member of the ISSC will contact you to arrange a one hour interview to discuss in more depth your opinions regarding HP's information systems. Please select up to 5 of the survey questions (by question number) that you want to be sure are discussed during the interview.

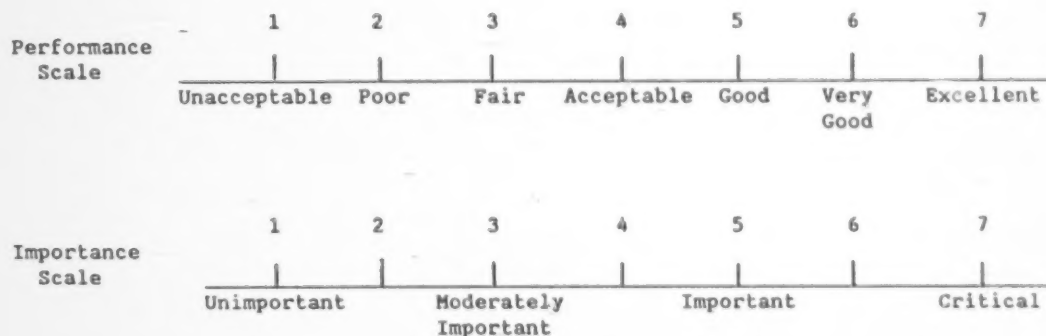
Thank you very much for taking the time to complete this survey.

Exhibit 5
Selections From A 28-Page Survey

INFORMATION SYSTEMS USER SATISFACTION SURVEY - PART 2

Instructions

Within each of the following sections is a list of various elements of service provided by each Information Systems Division area, followed by a column to enter your evaluation of the area's performance of the element of service, and a column to enter the importance of the element of service to your business needs. If a particular section or element of service does not relate to you, please do not provide a response. For those that do relate to you, enter in the appropriate column the numerical rating that best describes your opinion of performance and importance. The numerical rating scales for performance and importance are shown below. These rating scales are also printed on the back of each page for easy reference.



The Computer Systems and Applications Department's section contains a matrix for each CSA group. Down the left side of the matrix is a list of the application systems for which the group is responsible. Across the top are various factors for evaluating a particular system. Please evaluate those systems which relate to you using the above numerical rating scales. Enter the performance rating in the shaded portion of the box. Enter the importance rating in the white portion of the box.

I. METHODS AND COMPUTER SERVICES DEPARTMENT

METHODS

<u>Personnel</u>	<u>Performance</u>	<u>Importance</u>
Technical Knowledge.....	_____	_____
Knowledge of User Operations.....	_____	_____
Communications Skills.....	_____	_____
Cooperativeness.....	_____	_____
Courtesy.....	_____	_____
Effort To Solicit Your Ideas.....	_____	_____
Staff Level.....	_____	_____
Overall Performance.....	_____	_____

Service - General

Quality of service.....	_____	_____
Responsiveness to Business Needs.....	_____	_____
Timeliness of Requested Changes.....	_____	_____
Overall Service Provided.....	_____	_____

Telephone Service

Long Distance Quality.....	_____	_____
Local Quality.....	_____	_____
Equipment Reliability.....	_____	_____
Ease of Use.....	_____	_____
Responsiveness to Business Needs.....	_____	_____
Timeliness of Requested Changes.....	_____	_____
Company Telephone Book.....	_____	_____
Overall.....	_____	_____

Word Processing Service

Equipment Quality.....	_____	_____
Equipment Reliability.....	_____	_____
Ease of Use.....	_____	_____
Responsiveness to Business Needs.....	_____	_____
Timeliness of Requested Changes.....	_____	_____
Overall.....	_____	_____

Forms Design

Responsiveness to Business Needs.....	_____	_____
Timeliness of Requested Changes.....	_____	_____
Overall.....	_____	_____

Departmental Copiers

Equipment Quality.....	_____	_____
Equipment Availability.....	_____	_____
Equipment Reliability.....	_____	_____
Repair Service.....	_____	_____
Overall.....	_____	_____

Routines/Procedure Letters

Understandability.....	_____	_____
Up-To-Date.....	_____	_____
Overall.....	_____	_____

III. SYSTEM DATA PROCESSING DEPARTMENT

COMPUTER USER SUPPORT

Personnel

	<u>Performance</u>	<u>Importance</u>
Technical Knowledge.....	_____	_____
Knowledge of User Operations.....	_____	_____
Communications Skills.....	_____	_____
Cooperativeness.....	_____	_____
Courtesy.....	_____	_____
Staff Level.....	_____	_____
Overall Performance.....	_____	_____

Service - General

Accuracy of Instruction.....	_____	_____
Thoroughness of Instruction.....	_____	_____
Effectiveness of Instruction.....	_____	_____
Timeliness of Service.....	_____	_____
Responsiveness to Business Needs.....	_____	_____
Variety of Courses Offered.....	_____	_____
Distribution System for IBM Manuals.....	_____	_____
Overall Service Provided.....	_____	_____

Service - Training Media

Self Study Courses.....	_____	_____
Classroom Presentations.....	_____	_____
Computer Based Training.....	_____	_____
End User Group Meetings.....	_____	_____

Service - Classroom Presentations for Mainframe Training

Preparation by Instructors.....	_____	_____
Understandability of Material.....	_____	_____
Relevancy of Material.....	_____	_____
Content of Handouts.....	_____	_____
Format of Handouts.....	_____	_____
Adequacy of Training Facilities.....	_____	_____
Effectiveness of Presentation Media (Board, Overhead, Presentation System).....	_____	_____

Service - Classroom Presentations for PC Training

Preparation by Instructors.....	_____	_____
Understandability of Material.....	_____	_____
Relevancy of Material.....	_____	_____
Content of Handouts.....	_____	_____
Format of Handouts.....	_____	_____

V. Overall Information Systems DivisionGeneral

	<u>Performance</u>	<u>Importance</u>
Responsiveness to user's business needs.....	_____	_____
User participation in I.S. decisions.....	_____	_____
Determination of priorities for allocation of resources.....	_____	_____
Determination of priorities for projects requested by users.....	_____	_____
Cooperation between user departments and I.S.....	_____	_____
Information Systems strategy.....	_____	_____
Senior management involvement in I.S. strategy.....	_____	_____
Integration of I.S. strategy with Corporate Business Plan.....	_____	_____
I.S. staff's knowledge of user operations.....	_____	_____
User training in I.S. possibilities.....	_____	_____
Mainframe Hardware installed.....	_____	_____
Mainframe Software installed.....	_____	_____
Disaster Recovery Plan.....	_____	_____
Online Applications uptime.....	_____	_____

Needs for Products/Services Not Currently Provided

4th Generation Programming Language (Other Than IC/1)	N/A	_____
Database Management System.....	N/A	_____
PC's connected to local area networks (LAN's).....	N/A	_____
Other (specify).....	N/A	_____
_____	N/A	_____
_____	N/A	_____
_____	N/A	_____

The following space is available for comments regarding ways to improve Information Systems services.

COMPUTER SYSTEMS AND APPLICATIONS GROUP 1 SYSTEM RESPONSIBILITIES

	SERVICE					SYSTEM FEATURES									
	SUPPORT STAFF'S KNOWLEDGE OF USER OPERATIONS	RESPONSIVENESS OF STAFF TO USER NEEDS	QUALITY OF SERVICE	TIMELINESS OF SERVICE	SUPPORT LEVEL	EASE OF USE	FUNCTIONALITY	AVAILABILITY OF INFORMATION FOR DECISION MAKING	SATISFIES BUSINESS NEEDS	TIMELINESS OF OUTPUT	CONTENT OF OUTPUT	COST CONTAINMENT	LABOR SAVING	STATE OF THE ART	
SYSTEM	P I P I P I P I P I														
ACCOUNTS PAYABLE/MATERIAL & SUPPLIES															
GENERAL ACCOUNTING															
MASTER CHART OF ACCOUNTS															
STATEMENT GENERATION															
PROPERTY ACCOUNTING															
BANK INFORMATION MANAGEMENT															
BUDGET															
METER CHART PROCESSING															
ARCHIVES															

P - PERFORMANCE (PLACE PERFORMANCE RATING IN SHADED AREA)

I - IMPORTANCE (PLACE IMPORTANCE RATING IN WHITE AREA)